

WHAT IS CLAIMED IS:

1. A method for improving scene classification of a sequence of digital images comprising the steps of:

- (a) providing a sequence of images captured in temporal succession;
- (b) classifying each of the images individually based on information contained in the individual image to generate a first image classification; and
- (c) imposing a pre-determined temporal context model on the sequence of images to generate a final image classification.

2. The method as claimed in claim 1 wherein the information used in step (b) includes pixel information.

3. The method as claimed in claim 1 wherein the information used in step (b) includes metadata information.

4. The method as claimed in claim 1 wherein the pre-determined temporal context model in step (c) is independent of elapsed time between consecutive images

5. The method as claimed in claim 1 wherein the pre-determined temporal context model in step (c) is dependent on elapsed time between consecutive images

6. The method as claimed in claim 1 wherein the pre-determined temporal context model is a causal Hidden Markov Model dependent on the previous image.

7. The method as claimed in claim 6 wherein the pre-determined temporal context model is a causal Hidden Markov Model dependent on the previous image.

8. The method as claimed in claim 1 wherein the pre-determined temporal context model is a non-casual model dependent on both the previous and subsequent images.

9. The method as claimed in claim 8 wherein the pre-determined temporal context model is a non-casual model dependent on both the previous and subsequent images.

10. The method as claimed in claim 1 wherein the temporal context model is imposed using Viterbi algorithm.

11. The method as claimed in claim 1 wherein the temporal context model is imposed using the belief propagation algorithm.